

Claims

- [c1] A specially designed soft contact patch for treating eye disorders of the class including amblyopia or lazy eye in children and possibly adults such that:
The pupil section is opaque and essentially black or tinted dark and its iris section surrounding the pupil section is large enough to snugly fit inside the eye under the eyelid and is either transparent or colored to show or match the natural color of the eye, and it is perforated and porous to allow oxygenation of the iris and the sclera, so that for selected portions of time the stronger eye may be occluded or partially occluded.
- [c2] An invention as described in claim 1 wherein said specially designed soft contact patch is used in the occlusion of the stronger eye for selected portions of time, thus, the stronger eye can be occluded for a desirable period of time to force the weaker amblyopic eye to work harder and become stronger in time to correct amblyopia.
- [c3] A system as set forth in claims 1 and 2 wherein said specially designed soft contact patch is equipped with and displays graphical designs.

- [c4] A system as set forth in claim 1 wherein said specially designed soft contact patch is equipped with and displays a single or a variety of colors.
- [c5] An invention as described in claims 1, 2 and 3, wherein a pair of soft contact patches are used such that the one used in the strong eye is the soft contact patch to block or partially block the vision by means of a dark or tinted pupil section and the other soft contact is used like a soft contact lens to enable the weak eye correct its own refractive errors.
- [c6] The soft contact patch of claim 1, 2, 3 and 4 wherein said soft contact patch comprises polymethyl methacrylate.
- [c7] The soft contact patch of claim 1, 2, 3 and 4 wherein said soft contact patch comprises silicone.
- [c8] The soft contact patch of claim 1, 2, 3 and 4 wherein said soft contact patch comprises a combination of polymethyl methacrylate and silicone.
- [c9] The soft contact patch of claim 1, 2, 3 and 4 wherein said soft contact patch comprises cellulose acetate butyrate.
- [c10] The soft contact patch of claim 1, 2, 3 and 4 wherein

said soft contact patch comprises a gas permeable material.

- [c11] The soft contact patch of claim 1, 2, 3 and 4 wherein said soft contact patch comprises polyhydroxyethyl-methacrylate (HEMA), copolymers of HEMA and N-vinylpyrrolidone (NVP), silicone or other material known to be useful in the fabrication of soft contact lenses.
- [c12] The soft contact patch of claim 1, 2,3 and 4 wherein said soft contact patch comprises tinted pupil section made with typical polysilicone-acrylate polymer containing a typical photochromic colorant.
- [c13] The soft contact patch of claim 1, 2,3 and 4 wherein said soft contact patch comprises conventional soft polymeric gel materials used in conventional soft contact lenses.